

et

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/670,647	CHEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thuy V. Tran	2821	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment submitted on 04/06/2005.
2. ☒ The allowed claim(s) is/are 1-11 and 13-20.
3. ☒ The drawings filed on 06 April 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

  
**THUY V. TRAN**  
**PRIMARY EXAMINER**

### **DETAILED ACTION**

This is a response to the Applicant's amendment submitted on April 6<sup>th</sup>, 2005. In virtue of this amendment, claims 12 and 21 are canceled; and thus, claims 1-11 and 13-20 are now presented in the instant application.

#### ***Allowable Subject Matter***

1. Claims 1-11 and 13-20 are allowed.

#### ***Reasons for Allowance***

2. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or fairly suggest:

- A method of operating a discharge lamp system in which vertical segregation of vapor phase species is reduced, wherein each time period of the arc-straightening frequency is 2 to 16 times longer than a subsequent modulation at the combination radial plus longitudinal mode of the lamp, in combination with the remaining claimed limitations as called for in independent claim 1 (claims 2-11 are allowed since they are dependent on claim 1); and
- A discharge lamp system with reduced vertical segregation of vapor phase species, wherein said first generator provides a range of frequencies that includes a second azimuthal mode of the lamp, in combination with the remaining claimed limitations as called for in independent claim 13 (claims 14-20 are allowed since they are dependent on claim 13).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2821

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

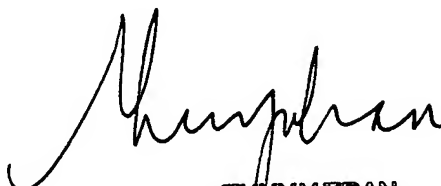
***Inquiry***

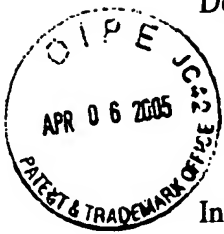
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

04/18/2005

  
**THUY V. TRAN**  
**PRIMARY EXAMINER**



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Nancy H. CHEN

) Group Art Unit: 2821

Serial No.: 10/670,647

) Examiner: Thuy V. Tran

Filed: September 25, 2003

)

For: Method Of Operating Lamp System And A

)

Discharge Lamp System Using a Combination

)

Radial And Longitudinal Acoustic Mode To

)

Reduce Vertical Segregation

)

CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on

April 4, 2005  
(Date)

by

Carlo S. Bessone  
Carlo S. Bessone

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

*Drawings Replacement approved -  
Ex - T. Tran  
04/18/05*

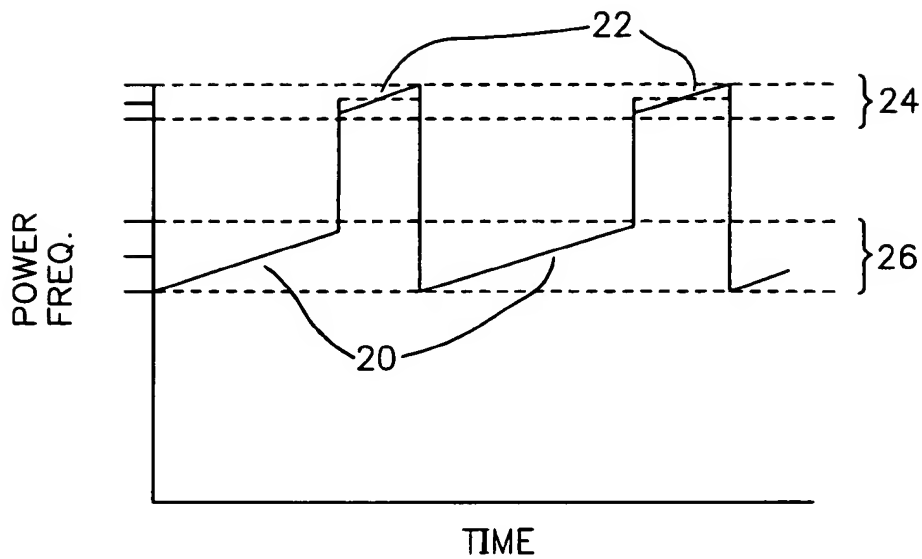
Dear Sir:

AMENDMENT

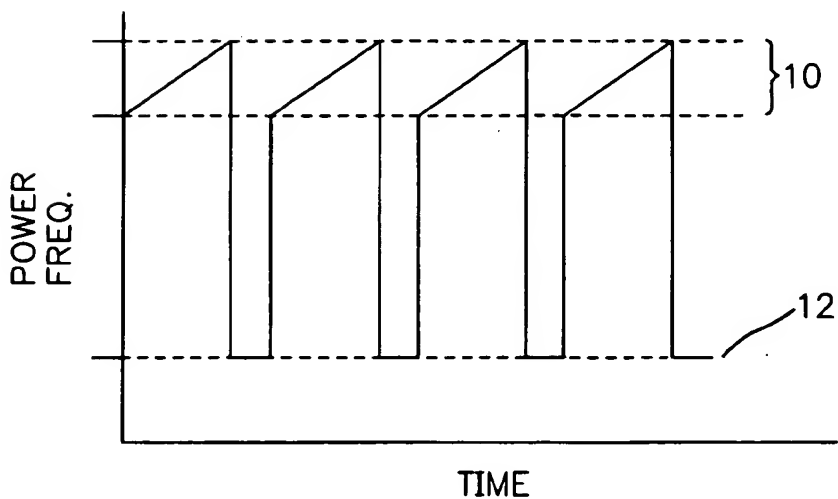
In response to the Office Action dated November 22, 2004, for which the shortened statutory period for response is set to expire three months after said date, please reconsider the above-entitled Application in view of the following amendment and remarks. A Petition under 37 CFR 1.136(a), extending the time for responding to the current Office Action for two month to April 22, 2005, accompanies this Amendment.

AMENDMENTS TO THE DRAWINGS

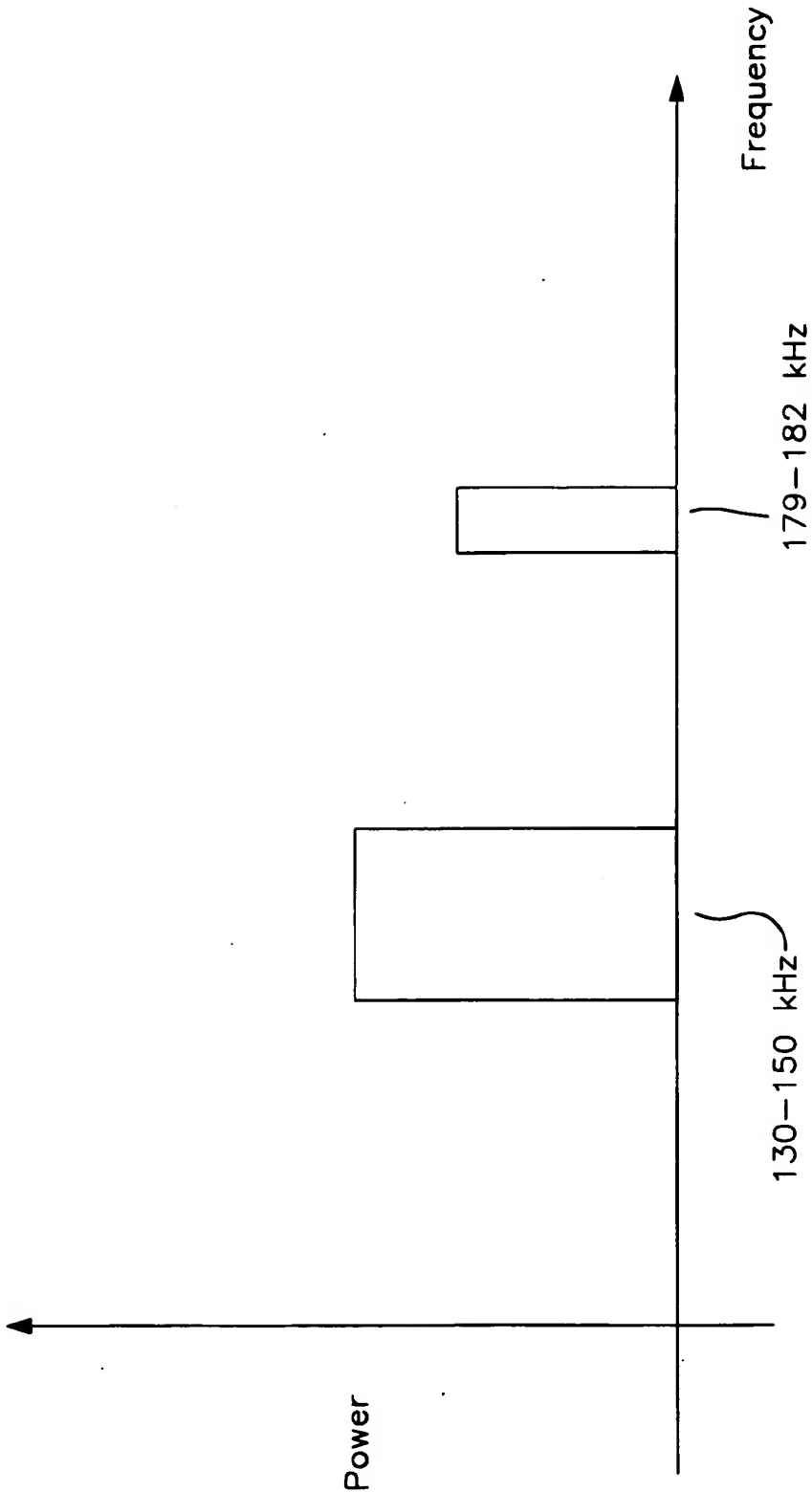
The attached sheets of drawings each marked "Replacement Sheet" includes changes to FIGS. 1-3. These sheets replace the original sheets including FIGS. 1-3.



**FIG. 2**



**FIG. 1**  
PRIOR ART



**FIG. 3**

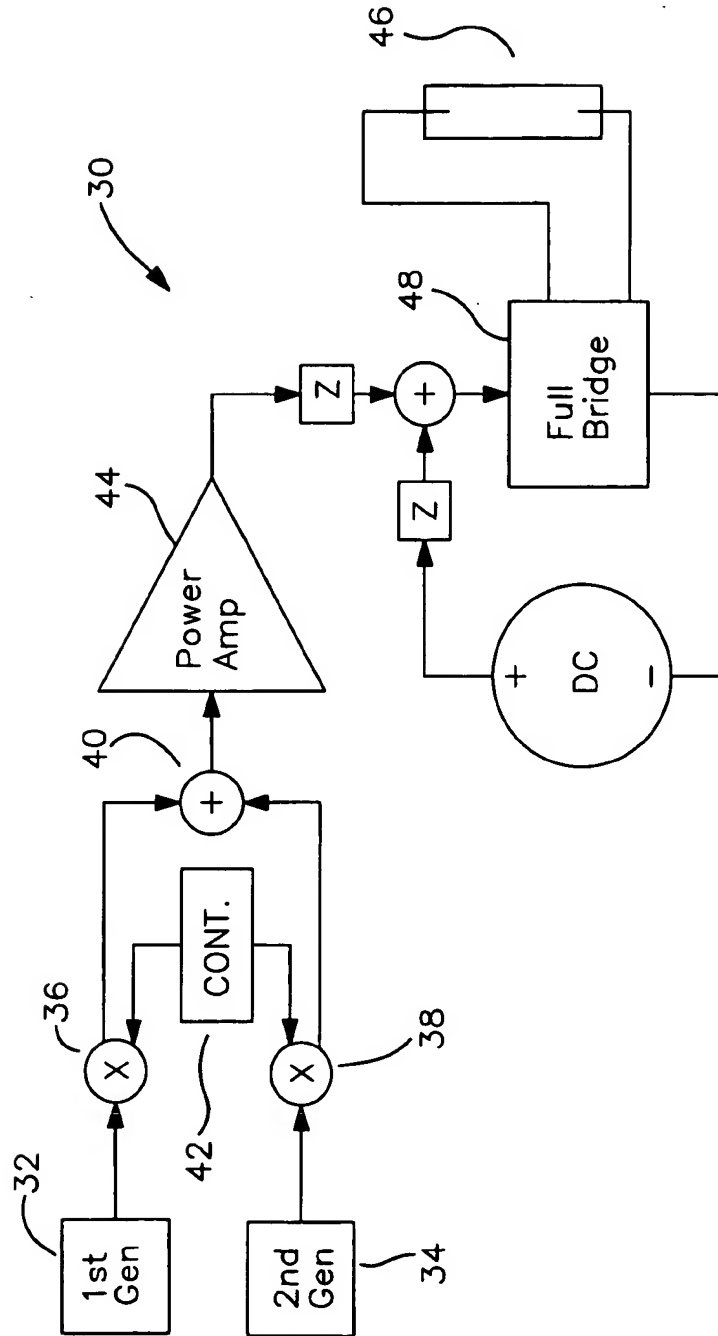


FIG. 4